

REMARKS

Thorough examination of the application is sincerely appreciated.

Applicant's claims are amended to clarify and particularly point out the patentable subject matter of the present invention. It is believed that claims are amended for formality reasons only as all recited subject matter was previously considered by the examiner.

Applicant thanks the examiner for indicating that the subject matter of claims 8, 9, 15 and 16 is allowable in accordance with the remarks on page 8 of the Office Action. However, the Office Action Summary lists claims 7, 8, 15 and 16 as being objected to. Correction and clarification are respectfully requested.

According to the Office Action, claims 1, 2, 10, 17 and 20 were rejected under 35 USC 103(a) as being obvious over US Patent 6,483,884 (hereinafter "Shen") in view of US Patent 6,169,728 (hereinafter "Perreault"). Further according to the Office Action, claims 4, 5, 11, 19 and 22 were rejected under 35 USC 103(a) as being obvious over Shen in view of Perreault and further in view of US Patent 6,567,482 (hereinafter "Popovic"). Still further according to the Office Action, claims 6, 7, 13 and 14 were rejected under 35 USC 103(a) as being obvious over Shen in view of Perreault and further in view of US Patent 6,069,917 (hereinafter "Werner"). Further to the Office Action, claims 3, 12, 18 and 21 were rejected under 35 USC 103(a) as being obvious over Shen in view of Perreault and further in view of US Patent 5,181,161 (hereinafter "Hirose").

In response, the rejections are respectfully traversed as 1) lacking sufficient factual support, and 2) failing to establish a prima facie case of obviousness in accordance with the established case and statutory law.

Referring to page 3 of the Office Action, with respect to Applicant's claim 2 the

examiner asserts, among other things, that “Perreault teaches calculating MSE from preamble and in order to calculate MSE, the comparison of the preamble with a predefined (known) preamble is inherent.” The examiner points to col. 4, lines 22-25 and col. 3, line 60 for the alleged disclosure. Applicant’s representative has carefully reviewed the cited portions of the patent and failed to find such a disclosure in the patent, contrary to the examiner’s remarks. The only mention of MSE can be found in col. 7, lines 18-27 of Perreault. This portion of the patent is reproduced below:

“In the preferred embodiment, the channel noise parameter is the received signal strength which, when measured while the channel is idle, provides an indication of noise levels, and is referred to as the received signal strength indicator (“RSSI”). The channel noise parameter may also be measured or determined utilizing other indicators, such as mean square error, phase or gain hits, nonlinear distortion, phase error, signal to noise ratios, and narrow band interference.”

It is respectfully submitted that the examiner is factually wrong in relying on Perreault to supplement Shen. Nowhere in that portion or anywhere else in the patent does Perreault show or teach, among other things, that MSE is calculated from a preamble, let alone from a portion of the preamble as recited in Applicant’s claim 1. Perreault merely teaches measuring a channel noise parameter using various indicators, but it is not equivalent or analogous to calculating MSE from a portion of a preamble according to Applicant’s claim 1. Thus, any attempt to analogize Perreault’s noise measurements using MSE to Applicant’s above-discussed feature is erroneous in fact. If the examiner believes otherwise, he is respectfully requested to provide an affidavit stating facts within his personal knowledge or prior art reference stating the same, because it can’t be supported by the record.

Furthermore, it is unclear whether the examiner relies on personal knowledge of the facts or those of a skilled artisan in his “inherency” statement. If this is the case, then “particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed

invention, would have selected these components for combination in the manner claimed.” In re Kotzab, 1371. The MPEP provides guidelines for relying on official notice and personal knowledge, which the Examiner did not follow in this case:

The rationale supporting an obviousness rejection may be based on common knowledge in the art of “well-known” prior art. The examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being “well-known” in the art ...

When a rejection is based on facts within the personal knowledge of the examiner, the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons.

See MPEP §2144.03. If the rejection is maintained, it is respectfully requested that the examiner provide an affidavit stating facts within his personal knowledge or an affidavit by a skilled artisan.

In addition, neither Shen nor Perreault teach or suggest, among other things, “selecting one of said first antenna and said second antenna **having a lower MSE** for subsequent reception of said incoming signals” as recited in Applicant’s claim 1 (emphasis added). Shen teaches that “the antenna with the higher RSSI value is selected,” while Perreault is completely silent on such Applicant’s feature. If the examiner disagrees, he is respectfully requested to specifically point out where in Shen or Perreault such Applicant’s feature is disclosed.

It is respectfully submitted that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation

of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143-§2143.03 for decisions pertinent to each of these criteria.

Analyzing the references according to the above roadmap, first the examiner did not offer any motivation or suggestion to modify or combine Shen and Perreault except for unsupported, conclusory remark that "MSE provides a better quality information." It is not clear what the basis was for such a statement. In contrast to the remarks in the Office Action, Shen is directed to "a process for selecting an antenna in a wireless communication system having at least two antennas" and Perreault is directed to "an apparatus and method for spectrum management in a multipoint communication system." There is no motivation or suggestion to combine the references.

Second, there is no reasonable expectation of success because the prior art references are not combinable, and they do not supplement each other.

Third, Shen and Perreault, even when combined, do not teach Applicant's feature of "calculating a mean-square error (MSE) for said first preamble sequence received from said first antenna and said second preamble sequence received from said second antenna by separately comparing said first preamble sequence and said second preamble sequence with a predefined preamble sequence; and selecting one of said first antenna and said second antenna having a lower MSE for subsequent reception of said incoming signals," as recited in claim 1 and discussed above. As argued above, these Applicant's features are not taught or suggested in the

prior art references, and their combination is deficient in teaching or suggesting all the claim limitations.

Therefore, the cited references fail to render obvious the claimed invention, because the above-identified criteria are not met. The claimed invention, according to claim 1, is thus distinguishable over the cited references.

Independent claims 10, 17 and 20 contain, among other things, the features of claim 1 as discussed above. Applicant essentially repeats the same argument as above with reference to claim 1 and assert that claims 10, 17 and 20 are also allowable for the same reasons as claim 1.

Claims 4, 5, 11, 19 and 22 depend, either directly or indirectly, from independent claims, which have been shown to be allowable over the prior art reference. Popovic is not relied upon in the Office Action to teach or suggest Applicant's features in claim 1. Hence, Popovic does not cure the deficiencies in Shen and Perreault. Accordingly, claims 4, 5, 11, 19 and 22 are also allowable by virtue of their dependency, as well as the additional subject matter recited therein. Applicant submits that the reason for the rejection of claims 4, 5, 11, 19 and 22 has been overcome and respectfully requests withdrawal of the rejection and allowance of the claims.

Similarly, claims 6, 7, 13 and 14 depend, either directly or indirectly, from independent claims, which have been shown to be allowable over the prior art reference. Werner is not relied upon in the Office Action to teach or suggest Applicant's features in claim 1. Hence, Werner does not cure the deficiencies in Shen and Perreault. Accordingly, claims 6, 7, 13 and 14 are also allowable by virtue of their dependency, as well as the additional subject matter recited therein. Applicant submits that the reason for the rejection of claims 6, 7, 13 and 14 has been overcome and respectfully requests withdrawal of the rejection and allowance of the claims.

Similarly, claims 3, 12, 18 and 21 depend, either directly or indirectly, from independent

claims, which have been shown to be allowable over the prior art reference. Hirose is not relied upon in the Office Action to teach or suggest Applicant's features in claim 1. Hence, Hirose does not cure the deficiencies in Shen and Perreault. Accordingly, claims 3, 12, 18 and 21 are also allowable by virtue of their dependency, as well as the additional subject matter recited therein. Applicant submits that the reason for the rejection of claims 3, 12, 18 and 21 has been overcome and respectfully requests withdrawal of the rejection and allowance of the claims.

In view of the above, it is respectfully submitted that Shen, Perreault, Popovic, Werner and Hirose, whether alone or in combination, do not anticipate or render obvious the present invention because the prior art references fail to teach or suggest all of the features of the present invention, as discussed hereinabove.

An earnest effort has been made to be fully responsive to the Examiner's correspondence and advance the prosecution of this case. If there are any questions, the Examiner is respectfully requested to call the undersigned attorney at the number listed below.

Please charge any additional fees associated with this application to Deposit Account No. 14-1270.

Respectfully submitted,

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